Response To Intervention: Research And Practice

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ABSTRACT

Response to Intervention (RTI) is a service model designed to meet the learning needs of students prior to diagnosis and placement in special education settings. Results of a quantitative quasi-experimental research study to investigate the relationship between the RTI plan and self-reported implementation practices among general education elementary teachers in a Florida school district using analysis of variance (ANOVA) revealed no significant difference between demonstration school and comparable school general education teachers' self-reported practices, self-reported implementation success rates, or self-reported data collection responsibilities. Recommendations for professional development opportunities for all teachers, paraprofessionals, and administrators involved in the RTI process based upon analyzed research study data are included.

Keywords: Response to Intervention; RTI, Research; Service Model

INTRODUCTION

Students categorized as learning disabled compose half the students referred for special education services, and many of these students have been misdiagnosed based upon outdated traditional achievement discrepancy model procedures (Fuchs & Fuchs, 2006; Graner, Faggella-Luby, & Fritschmann, 2005; Rosenblum, Larochette, Harrison, & Armstrong, 2010). Response to Intervention (RTI), a recent service delivery model, was designed to provide appropriate intervening academic skills and remediation to prevent over representation, misidentification, and labeling of students as learning disabled (Batsche et al., 2006; Brownell, Sindelar, Kiely, & Danielson, 2010; Bryant, Bryant, Gersten, Scammacca, & Chavez, 2008; Harrison, 2005; Huang, Bardos, & D'Amato, 2010). Identification through universal screening provides opportunities for the RTI framework to be implemented for remediation of struggling students by the general education teacher using regular curriculum supplemented with additional instructional resources (Brownell et al., 2010; Harrison, 2005; Kettler, Elliott, & Albers, 2008; Mangin, 2009; Werts, Lambert, & Carpenter, 2009).

RTI is supported through the Individual with Disabilities Education Improvement Act (IDEIA) (Hollenbeck, 2007; Koutsoftas, Harmon, & Gray, 2009; Morse, 2009; Reutenbuch, 2008; Shinn, 2007; Zirkel, 2009; Zirkel & Thomas, 2010). The RTI model merges educational accountability practices of general education and special education teachers to meet the needs of students by ensuring students do not continue to struggle and are making academic progress (Nunn et al., 2009; Truscott, Catanese, & Abrams, 2005; Silberglitt & Hintze, 2005; Zirkel & Thomas, 2010). Early identification is key to facilitating interventions and remediation to students before referring students for special education services and placement (Batsche et al., 2006; Gersten & Dimino, 2006; Harrison, 2005). Keeping learning disabled students in the general education classroom alongside non-disabled peers and providing them with specialized academic services coincides with the goals established in the No Child Left Behind Act of 2001 and IDEIA (Batsche et al., 2006; Bowen & Rude, 2006; Hollenbeck, 2007; Morse, 2009; Shinn, 2007; Zirkel, 2009).

A quantitative quasi-experimental research study was conducted to examine the archived reported information of educational plans associated with self-reported perceptions of classroom practices and RTI implementation by teachers at selected demonstration and comparable schools in a large Florida school district to

gain an understanding of the experiences from teachers involved in meeting the academic needs of struggling and learning disabled special education students. Answers were sought to the following research questions:

1. What is the difference between the demonstration schools' general education teachers' and the comparable schools' general education teachers' self-reported practices when implementing the RTI processes?
2. What is the difference between the demonstration school teachers' and the comparable school general education teachers' self-reported implementation success rates?
3. What is the difference between the demonstration schools' general education teachers' and the comparable schools' general education teachers' self-reported data collection responsibilities when implementing the RTI process?

A posttest survey instrument was used to measure the one-time independent variable, professional development, of general education teachers in the established school system. Dependent variables included the fidelity practices of implementing the RTI plan: teacher implemented practices, procedures within the classroom, school-based referral processes, and intervention methods. A RTI self-reporting checklist was used to collect statistical data from all general education teachers in 11 selected schools to test generalizability of professional development practices and implementation of the RTI district plan. Approximately 8,500 school-based employees were solicited, and 1,917 employees participated in the district data collection process.

FINDINGS

Teachers surveyed at the selected demonstration schools and teachers surveyed at comparable sites showed no differences in their self-reported practices in implementing the RTI process. Instituting extensive staff development training for teachers at demonstration sites did not improve the ability of teachers to meet the academic needs of struggling and learning disabled special education students. RTI process practices did not differ as demonstrated within the Table 1, Descriptives for Research Question.

Table 1
Descriptives for Research Question 1

Descriptives for RQ 1
Sum for RQ 1

Schools	N	Mean	SD	SE	95% Confidence Interval for Mean		Min	Max
					Lower bound	Upper bound		
Demonstration Schools	32	59.59	18.12	3.20	53.06	66.13	00.00	91.00
Comparable Schools	22	63.55	11.96	2.55	58.24	68.85	29.00	75.00
Total	54	61.20	15.90	2.16	56.86	65.54	00.00	91.00

Similarities derived from survey data for research question 1 of the two groups indicated both groups used supplemental interventions for academics and behaviors technology, and Internet-based research skills to collect data and formulate reports on implementation of the RTI model. Teachers at the surveyed sites used multiple assessment tools; therefore, teachers were able to determine student and curricular needs.

Teachers surveyed at the selected demonstration schools and teachers surveyed at comparable sites showed no differences in their self-reported implementation success rates of the RTI process (Table 2, Descriptives for Research Question 2). Successfully implementing the RTI process at demonstration sites by teachers who received extensive professional development did not improve the ability of the teachers to meet the academic needs of struggling and learning disabled special education students. RTI process results did not differ from teachers who received no professional development as demonstrated in Table 2, Descriptives for Research Question 2.

Table 2
Descriptives for Research Question 2

Descriptives for RQ 2
Sum for RQ 2

Schools	N	Mean	SD	SE	95% Confidence Interval for Mean		Min	Max
					Lower bound	Upper bound		
Demonstration Schools	32	19.31	7.10	1.25	16.75	21.87	00.00	30.00
Comparable Schools	22	20.27	4.63	0.99	18.22	22.33	10.00	30.00
Total	54	19.70	6.18	0.84	18.02	21.39	00.00	30.00

Teachers surveyed at selected demonstration schools and teachers surveyed at comparable sites showed no differences in data collection responsibilities within the implementation process of the RTI model (Table 3, Descriptives for Research Question 3). The problem-solving data collection and decision-making process of the RTI model incorporated by teachers at demonstration sites did not improve the ability of the teachers to meet the academic needs of struggling and learning disabled special education students. RTI process practices did not differ between the teachers of the different survey groups as demonstrated in Table 3, Descriptives for Research Question 3.

Table 3
Descriptives for Research Question 3

Descriptives for RQ 3

Sum for RQ 3

Schools	N	Mean	SD	SE	95% Confidence Interval for Mean		Min	Max
					Lower bound	Upper bound		
Demonstration Schools	32	108.72	26.62	4.71	99.12	118.32	49.00	159.00
Comparable Schools	22	109.95	24.72	5.27	98.99	120.92	46.00	160.00
Total	54	109.22	25.64	3.49	102.22	116.22	46.00	160.00

Much of the district assessment data collected, analyzed, and used in the RTI process relates to academics and student behaviors. Teachers are familiar with this data; therefore, the learning process in a decision-making implementation model of problem solving hypotheses and goal setting for students are not new. Teachers of both surveyed groups have used the Professional Learning Community forum to discuss student data and make flexible student-grouping decisions for several years; using data in a decision-making process to plan lessons and drive instruction is not new to these teachers.

RECOMMENDATIONS

Professional development opportunities for all teachers, paraprofessionals, and administrators involved in the RTI process should first include facilitating the understanding of the data collection processes, the data sources, and the data analysis that are necessary to meet the needs of struggling students. Teachers and administrators gather, review, discuss, and attempt to make decisions based upon the data obtained on identified students, but teachers and administrators do not always know the appropriate steps in the process, nor do they know whom to contact to ask questions regarding the decision-making framework of the RTI model. Based upon the results of this research study, all teachers and administrators involved in the RTI model need professional development in the procedural steps of the data collection process from start to finish. Although results showed no differences between the groups of teachers, results chosen represented the middle range of choices. These results were lower than the researcher expected. Data suggest a lack of confidence within the reported skills from participating teachers. High survey results represent a strong confidence level, whereas low survey results represent no confidence in skills.

Direct instruction (DI), a teaching method previously implemented within the Florida school district surveyed, was replaced with scripted lessons using the mini-lesson format. The direct instruction method reinforces repetition necessary for the struggling student or the potential specific learning-disabled student, as this student needs to hear and repeat a concept many times for the skill to become learned. Teachers need professional development in direct instruction.

Additional recommendations based upon the results of the research study include providing the teachers who apply interventions related to the three tiers of the RTI process with professional developmental training in the areas of differentiated and scaffold instruction. Remediation, intervention, and strategies to address the needs of struggling students require specialized and intensive teaching methods to pinpoint the skills in which students are deficient. The purpose of remedial instruction is to close achievement gaps.

CONCLUSION

Continued research is important to effect changes to educational policies and procedures. Response to Intervention is one of the latest changes occurring in the field of education affecting the delivery of special education services (Brownell et al., 2010). The RTI process will continue to be refined as educational leaders learn more about best practices in meeting the needs of struggling students.

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